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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/623,229	07/18/2003	Stephen G. Kelly	A706WTN	A706WTN 2723	
7590 11/08/2004  Michael A, Sileo, Jr.  Microsemi Corporation  Atrium Executive Suites,  800 E. Campbell Rd., Suite 199			EXAM	EXAMINER	
			MAI, A	MAI, ANH D	
			ART UNIT	PAPER NUMBER	
			2814	2814	
Richardson, TX 75080			DATE MAILED: 11/08/2004	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.	Applicant(s)				
10/623,229	KELLY, STEPHEN G.				
Examiner	Art Unit				
Anh D. Mai	2814				
ears on the cover sheet with the c	orrespondence addre	)ss			
6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this comm D (35 U.S.C. § 133).	nunication.			
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10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
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s have been received. s have been received in Applicati ity documents have been receive (PCT Rule 17.2(a)).	on No ed in this National Sta	age			
Paper No(s)/Mail Da	ate	52)			
	Examiner  Anh D. Mai  Pars on the cover sheet with	Examiner  Anh D. Mai  Pars on the cover sheet with the correspondence addresses on the considered timely. If apply and will expire \$1X\$ (6) MONTHS from the mailing date of this communication to become ABANDONED (35 U.S.C. § 133).  Action is non-final.  Covered for formal matters, prosecution as to the max parte Quayle, 1935 C.D. 11, 453 O.G. 213.  In from consideration.  The election requirement.  The election requirement.  The election requirement of the drawing(s) is objected to. See 37 CFR 1.85(a). On is required if the drawing(s) is objected to. See 37 CFR aminer. Note the attached Office Action or form PTO-priority under 35 U.S.C. § 119(a)-(d) or (f).  The have been received in Application No.  The correspondence addresses of the certified copies not received.  The paper No(s)/Mail Date.  Th			

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#### **DETAILED ACTION**

### Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-15 in the reply filed on October 15, 2004 is acknowledged.

Claims 16-23 have been withdrawn from further consideration pursuant to 37 CFR
 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking

claim. Election was made without traverse in the reply filed on October 15, 2004.

## Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested:

LIGHT EMITTING DEVICE HAVING LUMINOUS COMPOUND INTERMIXING
CLEAR EPOXY TO FILTER AND COMBINE PREDETERMINED WAVELENGHTS.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14, line 2, recites: "further including a processing adjuvant".

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What is a processing adjuvant encompassed?

Since different worker using different adjuvant process, therefore, there are so many variation.

Applicant should point out the adjuvant process useful for his invention.

Furthermore, since the claimed invention is an apparatus, the process is given no patentable weight.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Höhn et al. (U.S. Patent No. 6,066,861).

With respect to claim 1, Höhn teaches a light emitting device package as claimed including:

a semiconductor junction (1) operable to emit light when biased;

an homogenous composition (5) deposited on the semiconductor junction adapted to filter and combine predetermined wavelengths of light from the semiconductor surface. (See Figs. 1-5, col. 1, line 62-col. 7, line 34).

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With respect to claim 2, insofar as the apparatus is concerned, the homogenous composition of Höhn comprises a mixture of a molding compound (5) and a luminous substance (6).

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# Product by process limitation:

The expressions "a sintered and pelletized mixture of a molding compound and luminous substance" (as recited in claim 2); "is in palletized form prior to sintering and palletized" (as recited in claim 3); "is in powder form prior to sintering and pelletization" (as recited in claim 5); "is less than or equal to 5 microns in size prior to sintering and pelletization" (as recited in claim 6); "is spherical or flake-like prior to sintering and pelletization" (as recited in claim 7); "incorporating a thixotorpic agent to thicken the epoxy casting resin" (as recited in claim 9) and "before admixing and palletizing" (as recited in claim 15) is/are taken to be a product by process limitation and is given no patentable weight. A product by process claim directed to the product per se, no matter how actually made, In re Hirao, 190 USPQ 15 at 17 (footnote 3). See In re Fessman, 180 USPQ 324, 326 (CCPA 1974); In re Marosi et al., 218 USPO 289, 292 (Fed. Cir. 1983); In re Brown, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972); In re Pilkington, 411 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969); Buono v. Yankee Maid Dress Corp., 77 F.2d 274, 279, 26 USPQ 57, 61 (2d. Cir. 1935); and particularly In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985), all of which make it clear that it is the patentability of the final structure of the product "gleaned" from the process steps, which must be determined in a "product by process" claim, and not the patentability of the process. See also

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MPEP 2113. Moreover, an old and obvious product produced by a new method is not a patentable product, whether claimed in "product by process" claims or not.

Note that Applicant has burden of proof in such cases as the above case law makes clear.

With respect to claim 3, insofar as the apparatus is concerned, the molding compound (5) of Höhn is formed.

With respect to claim 4, insofar as the apparatus is concerned, the molding compound (5) of Höhn comprises a clear epoxy.

With respect to claim 5, insofar as the apparatus is concerned, the luminous substance (6) of Höhn is in powder form.

With respect to claim 6, insofar as the apparatus is concerned, the luminous powder (6) of Höhn is less than or equal to 5 microns in size.

With respect to claim 7, insofar as the apparatus is concerned, the luminous powder (6) of Höhn is spherical or flake-like in shape.

With respect to claim 8, the molding compound (5) of Höhn comprises a clear epoxy.

With respect to claim 9, the clear epoxy (5) of Höhn further incorporating a thixotorpic agent to thicken the epoxy casting resin.

With respect to claim 10, the luminous substance (6) of Höhn further comprises a Cerium doped garnet.

With respect to claim 11, the luminous substance (6) of Höhn further comprises YAG:Ce.

With respect to claim 12, the luminous substance (6) of Höhn having admixed a predetermined amount of mineral diffuser so as to optimize the luminous pattern of the composition.

With respect to claim 13, the mineral diffuser of Höhn comprises CaF<sub>2</sub>.

With respect to claim 14, as best understood by the examiner, the molding compound (5) and luminous substance (6) composition of Höhn further including a processing adjuvant.

With respect to claim 15, insofar as the apparatus is concerned, the LED package of Höhn further comprises a predetermined chromaticity of light based on the luminous powder's percentage by weight of the composition.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh D. Mai whose telephone number is (571) 272-1710. The examiner can normally be reached on 9:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic <u>Business Center</u> (EBC) at 866-217-9197 (toll-free).

Anh D. Mai

November 2, 2004